



Wireless Acceleration Temperature Node

Model: A306

Port	Charge input interface (TNC jack)	Temperature input interface (three-core jack)	USB data port (four-core aviation jack)	24V power supply port (two-core aviation jack)
1	TNC core connection S+	VDD	VIN	VIN
2	TNC earthing S-	DATA	GND	GND
3		GND	USB-	
4			USB+	



The A306 wireless acceleration temperature node is a new-type 802.15.4 Protocol-based data acquisition system capable of forming various network topology structures such as star-type, linear and mesh network through to self-organization.

This wireless acceleration temperature node features easy use and wireless digital signal transmission mode eliminates the noise interference caused by long-cable transmission, thus realizing the extremely high measurement accuracy and anti-interference capacity of the whole measurement system.

Characterized by compact structure and small size, the A306 wireless acceleration temperature node is composed of a power module, an acquisition & processing module and a radio transmission & receiving module and contained in a PC+ABS plastic housing. As it can form a huge wireless sensor network and support thousands of measurement points to conduct large-scale structural tests at the same time, it is widely used in structural static tests, fatigue tests and loading experiments of bridges, buildings, airplanes, vessels and vehicles.



Technical parameters of the node	
Supply voltage:	24V
Supply voltage of ICP circuit:	24V
Supply current of ICP circuit:	4mA
Stable time of ICP circuit:	0.6S
Measurement range of acceleration input channel:	±5000mV
Measurement range of temperature input channel:	-55°C to +125°C (connected with DS18B20 only)
Channel amount:	3 acceleration input channels and 3 temperature input channels
Acquisition & storage frequency of acceleration input channel:	10KSPS/5KSPS/500SPS/200SPS
Acquisition & storage frequency of temperature input channel:	1SPS
Acquisition & upload frequency:	1SPS (the uploaded value is instant value)
A/D resolution:	16Bit
Resolution of voltage channel:	±0.19mV
Resolution of temperature channel:	±0.0625°C
Storage capacity:	1GB
Largest amount of stored files:	3967
Frequency response (-3dB) of acceleration input channel:	4kHz;
Current during real-time transmission & storage & acquisition:	28mA (supply voltage: 24V, no external sensor)
Current during storage & acquisition:	27.6mA (supply voltage: 24V, no external sensor)
Current during quiescence:	11mA (supply voltage: 24V, no external sensor)



SINOCERA



Global Sensor
Technology
